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(54) Title: PAPER SIZING COMPOSITION

(57) Abstract: The invention relates to the sizing of paper and board using alkenyl succinic anhydride (ASA). The invention provides a sizing composition which comprises an aqueous emulsion of an ASA wherein the ASA incorporates a maximum of 1% by weight (preferably a maximum of 0.5 % by weight) of polymeric residues. The composition may incorporate less than 0.5 % by weight of olefins. Paper sizing compositions in accordance with the invention provide enhanced resistance to penetration of the edges of paper and board by agents such as hot hydrogen peroxide and lactic acid.



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(72) Inventors; and

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(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 D21H21/16

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) $IPC \quad 7 \quad \quad D21H$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
X	WO 97 30039 A (NESTE OY ; MAEKIPEURA PETRI (FI); KAPANEN MIKA (FI); TULISALO JUKKA) 21 August 1997 (1997-08-21) page 7, paragraph 4 -page 8, paragraph 1; claims 1-13 page 11, paragraph 1		
X	EP 0 359 316 A (PROCTER & GAMBLE) 21 March 1990 (1990-03-21) page 2, line 41-46; claims 1-8	1,5,10	
A	US 5 939 562 A (HALME ERKKI ET AL) 17 August 1999 (1999-08-17) the whole document	1-12	
Α .	US 6 359 093 B1 (OYANAGI SHOKO ET AL) 19 March 2002 (2002-03-19) the whole document	1-12	
	-/		

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Karlsson, L

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